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EXAMINER

ZHOU, TING

ART UNIT

PAPER NUMBER

2173

DATE MAILED: 11/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/007,358

Applicant(s)

ORTEGA ET AL.

Examiner

Ting Zhou

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 3 December 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The amendment filed on 3 December 2004 have been received and entered. Claims 1-9 are pending in the application.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1, 6 and 7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Independent claims 1, 6, and 7 claim the limitations “wherein selected ones of the action glyphs, material glyphs and instrumentation glyphs are arranged in relationship to each other in accordance with a predetermined structure to form a specific instruction *understandable* by the person following the instruction irrespective of the written language” on lines 11-15 of claim 1, and “arranging the selected glyphs in relationship to each other in accordance with a predetermined structure to form a specific instruction *understandable* by the person following the instruction irrespective of the written language understood by the person”, on lines 14-17 of claim 6, and “an input device by which a user enters instructions in a language understood by the user”, on lines 14-15 of claim 7. The terms “understandable” and “understood”, used in the limitations recited above are subjective terms, and therefore cannot be given reasonable meaning. A person’s understanding of an instruction is relative in that one person’s understanding of an instruction is different than another person’s understanding of the instruction. In addition, the specification has not provided any objective definition identifying a

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standard for determining when an instruction is understandable by a user, or what constitutes an understandable instruction. In the absence of a workable objective standard, “understandable” and “understood” do not just include a subjective element, it is completely dependent on a person’s subjective opinion. Therefore, the term “understandable” and consequently independent claims 1 and 6 and respective dependent claims are indefinite.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

3. Claims 1-5 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claims 1-5 are not tangible. Although the preamble of independent claim 1 recites a system, the remainder of the claim does not support the preamble. The claimed features and elements of independent claim 1 do not include hardware components or features that are necessarily implemented in hardware. The “system” appears directed to software, per se, lacking any hardware to enable any functionality to be realized. Therefore, the claimed features of claim 1 is actually a software, or at best, directed to an arrangement of software, and software claimed by itself, without being executed or implemented on a computer medium, is intangible. Additionally, independent claim 1 doesn’t appear to claim any executable instructions that would cause a computer to perform a practical application with a useful, concrete and tangible result and is therefore non-functional descriptive material.

4. To expedite a complete examination of the instant application, the claims rejected under 35 U.S.C. 101 (nonstatutory) above are further rejected as set forth below in anticipation of the applicant amending these claims to place them within the four statutory categories of invention.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 1-4 and 6 are rejected under 35 U.S.C. 102(e) as being anticipated by Baker et al. U.S. Publication 2002/0163544 (hereinafter “Baker”).

Referring to claims 1 and 6, as best understood by the examiner, Baker teaches a system and method comprising a plurality of action glyphs representing a plurality of defined actions which are able to be undertaken by the person following the instructions, a plurality of material glyph images representing a plurality of defined materials which are includable in the created instruction, and a plurality of instrumentation glyphs representing a plurality of instruments which are includable in the created instructions (the system and method comprises a plurality of symbols represented by a plurality of images; for example, there are action symbols such as the “move” and “file” symbols, material symbols such as the “eye”, “globe” and “money” symbols,

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and instrumentation symbols such as the “keypad” and “file cabinet” symbols) (page 3, paragraph 0039, page 4, paragraph 0040, and further shown in Figure 2), wherein selected ones of the action glyphs, material glyphs and instrumentation glyphs are arranged in relationship to each other in accordance with a predetermined structure to form a specific instruction understandable by the person following the instruction irrespective of the written language understood by the person (the symbols, which are images that can be recognized by any person, are arranged in symbol sequences to execute a command) (page 2, paragraph 0013).

Referring to claim 2, Baker teaches the glyphs are configured with color combination, which provides visual distinction between the glyphs (for example, using highlighting with dark and light colors for symbols to differentiate the symbols) (page 3, paragraph 0038 and page 4, paragraph 0043).

Referring to claim 3, Baker teaches when the instruction is viewed from left to right, the predetermined structure requires at least one of the action glyphs to be placed as the initial glyph, at least one of the material glyphs to be placed following the at least one action glyph, and at least one of the instrument glyphs to be placed following the at least one material glyph (for example, the user creates the command sequence using the symbols “new” and “all” and “file cabinet” to create a new database, with the instruction sequence comprising “new” representing an action symbol, “all” representing a material symbol and “file cabinet” representing an instrument symbol) (page 8, paragraph 0080).

Referring to claim 4, Baker teaches the predetermined structure creates a scenario (the sequences symbols create an executable command; for example, the symbol sequence “move”

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and “globe” and “thumbs up” represents the scenario of “move to top”) (page 3, paragraph 0039).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Baker et al. U.S. Publication 2002/0163544 (hereinafter “Baker”), as applied to claim 1 above, and further in view of Ferriter U.S. Patent 5,212,635.

Referring to claim 5, Baker teaches all of the limitations as applied to claim 1 above. However, Baker fails to explicitly teach the instructions being directed to a manufacturing process. Ferriter teaches a system for displaying symbols to represent instructions (displaying an image representation along with the textual descriptions associated with an instruction) (Ferriter: column 3, lines 51-62 and further shown in Figure 2) similar to that of Baker. In addition, Ferriter further teaches the instructions relating to a manufacturing process (Ferriter: column 2, lines 55-56 and column 3, lines 58-65). It would have been obvious to one of ordinary skill in the art, having the teachings of Baker and Ferriter before him at the time the invention was made, to modify the system for displaying symbol representations for instructions taught by Baker to include the application to manufacturing processes of Ferriter. One would have been motivated

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to make such a combination in order to improve the documentation used by operators by crossing the language barrier and creating and displaying instructions that everyone can understand, regardless of the language and literacy of the operator.

7. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baker et al. U.S. Publication 2002/0163544 (hereinafter "Baker") and Ballard U.S. Patent 6,321,243.

Referring to claim 7, Baker teaches a system comprising a plurality of action glyphs representing a plurality of defined actions which are able to be undertaken by the person following the instructions, a plurality of material glyph images representing a plurality of defined materials which are includable in the created instruction, and a plurality of instrumentation glyphs representing a plurality of instruments which are includable in the created instructions (the system and method comprises a plurality of symbols represented by a plurality of images; for example, there are action symbols such as the "move" and "file" symbols, material symbols such as the "eye", "globe" and "money" symbols, and instrumentation symbols such as the "keypad" and "file cabinet" symbols) (Baker: page 3, paragraph 0039, page 4, paragraph 0040, and further shown in Figure 2), a glyph instruction generating system having an electronic storage element which stores electronic images of the action glyphs, the material glyphs and the instrumentation glyphs (storing the symbol sequences in memory) (Baker: page 3, paragraphs 0033-0034 and page 6, paragraph 0058), an input device by which a user enters instructions in a language understood by the user (an integrated input and display device for inputting and outputting selected symbols) (Baker: page 3, paragraph 0034, page 7, paragraph 0065) and an output device which outputs hardcopy images of the selected glyphs in relationship to each other

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in accordance with a predetermined structure to represent the inputted instructions (displaying the selected symbols, in sequence of selection, on the display area shown in Figure 4) (Baker: page 5, paragraph 0054). However, Baker fails to explicitly teach a translator configured to receive the inputted instructions and to interpret the inputted instructions so as to select the glyphs, which represent the inputted instructions. Ballard teaches a system for creating glyphs (Ballard: column 2, lines 35-41) similar to that of Baker. In addition, Ballard further teaches a glyph instruction generating system comprising an electronic storage element (Ballard: column 4, lines 51-53 and column 5, lines 6-9), input device by which users enter instructions in a language understood by the user (Ballard: column 5, lines 9-14), a translator configured to receive the inputted instructions and to interpret the inputted instructions so as to select the glyphs which represent the inputted instructions (convert the inputted instructions, or text to glyphs) (Ballard: column 1, lines 26-33, column 3, lines 35-41 and column 7, lines 19-23), and an output device for displaying the selected glyphs (Ballard: column 5, lines 18-22). It would have been obvious to one of ordinary skill in the art, having the teachings of Baker and Ballard before him at the time the invention was made, to modify the system for creating glyphs of Baker to include the translator for converting input text to glyphs, taught by Ballard. One would have been motivated to make such a combination in order to cross the language barrier and create information that everyone can understand, regardless of nationality and literacy.

Referring to claim 8, Baker fails to explicitly teach the input device presenting the user with a plurality of languages in which to enter instructions. Ballard teaches a system for creating glyphs (Ballard: column 2, lines 35-41) similar to that of Baker. In addition, Ballard further teaches a plurality of languages in which to enter instructions (a plurality of language systems

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such as English, German, French, etc. in which characters, or scripts can be entered to be used to convert to glyphs) (Ballard: column 5, lines 53-67 through column 6, lines 1-4). It would have been obvious to one of ordinary skill in the art, having the teachings of Baker and Ballard before him at the time the invention was made, to modify the system for creating glyphs of Baker to include the plurality of languages taught by Ballard. One would have been motivated to make such a combination in order to cross the language barrier and create information that everyone can understand, regardless of nationality and literacy.

Referring to claim 9, Baker, as modified, teach the user is guided through a process for generating instructions (user is guided in the selection of symbols by differentiating valid symbols that the user can choose from to create the instruction from the invalid symbols) (Baker: age 7, paragraphs 0065-0067).

Response to Arguments

8. Applicants' arguments filed 3 December 2004 have been fully considered but they are not persuasive.

9. The applicants assert that Baker is directed towards computer devices, such as a mobile phone or a PDA that is able to access an application program or command based on the selection of corresponding sequences or symbols, whereas on the other hand, independent claims 1 and 6 are directed to a system "wherein selected ones of the action glyphs, material glyphs and instrumentation glyphs are arranged in relationship to each other in accordance with a predetermined structure to form a specific instruction understandable by the person following the

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instruction irrespective of the written language understood by the person". With respect to the wherein clause limitation in claims 1 and 6, the examiner respectfully draws the applicant's attention to MPEP 2106, which states that:

The subject matter of a properly construed claim is defined by the terms that limit its scope. It is this subject matter that must be examined. As a general matter, the grammar and intended meaning of terms used in a claim will dictate whether the language limits the claim scope. Language that suggests or makes optional but does not require steps to be performed or does not limit a claim to a particular structure does not limit the scope of a claim or claim limitation. The following are examples of language that may raise a question as to the limiting effect of the language in a claim:

- (A) statements of intended use or field of use,
- (B) "adapted to" or "adapted for" clauses,
- (C) "wherein" clauses, or
- (D) "whereby" clauses.

This list of examples is not intended to be exhaustive.

Examiner respectfully notes that claim language such as "wherein" merely suggests limitations or makes limitations optional. In using claim language such as "wherein" applicant has not required steps to be performed or limited an apparatus to a particular structure (see MPEP 2106).

10. The applicants argue that the symbols taught by Baker are used for invoking application programs or actions taken by application programs and that Baker does not teach the use of glyphs to represent materials and instrumentation as recited in claims 1 and 6 of the present application. The examiner respectfully disagrees. The examiner notes that although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993). The limitations of the claims recite "a plurality of action glyphs representing a plurality of defined actions which are able to be undertaken by the person following the instructions; a plurality of material glyph images representing a plurality of defined materials which are includable in the

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created instructions; and a plurality of instrumentation glyphs representing a plurality of instruments which are includable in the created instructions". Baker teaches a plurality of glyphs which can be included in a glyph sequence to create an instruction to be undertaken, as recited and shown in page 2, paragraph 0013, page 8, paragraph 80 and Figure 2. The glyphs taught by Baker, as shown in Figure 2 and described in page 4, paragraph 0040, include action glyphs graphically representing actions to be taken such as the "find" symbol and "move" symbol, material glyphs graphically representing materials such as the "eye" symbol and the "money" symbol and instrument glyphs graphically representing computer instruments, such as the "keypad" symbol. The examiner further wishes to note that the online dictionary *Merriam-Webster Online* (<http://www.m-w.com/>) defines the words "material" and "instrument" as the following:

Main Entry: ¹**ma·te·ri·al** ¶

Pronunciation: m&-'tir-E-&l

Function: *adjective*

Etymology: Middle English *materiel*, from Middle French & Late Latin; Middle French, from Late Latin *materialis*, from Latin *materia* matter -- more at MATTER

1 a (1) : relating to, derived from, or consisting of matter; *especially* : **PHYSICAL** <the material world> (2) : **BODILY** <material needs> **b** (1) : of or relating to matter rather than form <material cause> (2) : of or relating to the subject matter of reasoning; *especially* : **EMPIRICAL** <material knowledge>

2 : having real importance or great consequences <facts material to the investigation>

3 a : being of a physical or worldly nature **b** : relating to or concerned with physical rather than spiritual or intellectual things <material progress>

- **ma·te·ri·al·ly** ¶/-E-&-IE/ *adverb*

- **ma·te·ri·al·ness** *noun*

Main Entry: ¹**in·stru·ment** ¶

Pronunciation: 'in(t)-str&-m&nt

Function: *noun*

Etymology: Middle English, from Latin *instrumentum*, from *instruere* to arrange, instruct

1 : a device used to produce music

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2 a : a means whereby something is achieved, performed, or furthered **b** : one used by another as a means or aid : **DUPE, TOOL**

3 : **IMPLEMENT**; *especially* : one designed for precision work

4 : a formal legal document (as a deed, bond, or agreement)

5 a : a measuring device for determining the present value of a quantity under observation **b** : an electrical or mechanical device used in navigating an airplane; *especially* : such a device used as the sole means of navigating

In relation with the above definitions, “eye” and “money” consist of matter and therefore conform to the definition of “material”; similarly, “keypad” is a means where something (typing) is performed and therefore conforms to the definition of “instrument”. Therefore, the examiner respectfully contends that the “eye” and “money” glyphs taught by Baker are a type of “material” glyph and the “keypad” glyph taught by Baker is a type of “instrumentation” glyph.

11. With respect to claim 7, the applicants argue that unlike the glyphs disclosed in the applicants’ invention, Ballard does not teach or suggest that the glyphs are representations of instructions related to actions, materials and/or instruments. In response to applicants’ argument that Ballard is nonanalogous art, it has been held that a prior art reference must either be in the field of applicant’s endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, both Baker and Ballard teach the use of glyphs as representational elements. Although the glyphs taught by Ballard represent a character or a string of characters instead of actions, materials and/or instruments, Ballard teaches the use of a glyph as a substitute display item representing another element (column 2, lines 33-45 and column 7, lines 49-23), which is similar to the functions of the glyphs used in the Baker reference and the subject invention, i.e. using the

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glyphs as a substitute display representing elements such as materials, instruments and actions.

Therefore, the examiner respectfully contends that the teachings of Baker and Ballard can be reasonably combined to produce the limitations of the subject invention.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ting Zhou whose telephone number is (571) 272-4058. The examiner can normally be reached on Monday - Friday 8:30 am - 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Cabeca can be reached at (571) 272-4048. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-4058.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TZ


CAO (KEVIN) NGUYEN
PRIMARY EXAMINER